



## **Memorandum**

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Jennifer Jones, CDM Smith  
Christina M Gonzalez, CDM Smith*

*Date: April 11, 2016*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## **Introduction**

This memorandum summarizes the findings of biological monitoring on April 11, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:30 p.m. Weather conditions were mostly cloudy. Temperatures ranged from 57°F in the morning to 66°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with preparing soils and planting on the south bank, installing wiring for light fixtures, and installing fence panels around the pump house. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## **Biologist's Field Log**

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and two crew members are on site.

6:25 am. The initial biological survey begins as crews move their vehicles inside the staging area. Two double-crested cormorants fish in the West Basin. Three house finches and a black phoebe perch on the privacy fence near Washington. An American Crow flies into the west mudflat. Two Cassin's kingbirds perch on the palms along Washington. Six American wigeon fly into the Central Basin. Four gadwall swim in the East Basin. A double-crested cormorant stands on the bank. A dark-eyed junco can be heard along the bike path. An American crow is seen in one of the nests on the

bike path. An Allen's hummingbird hovers over the southeast channel. There is a great amount of green algae in the water. A great egret flies across the Basin and heads toward the east bank. A black-crowned night heron flies across and lands in the southeast channel. The Allen's hummingbird is not in her nest. A black-crowned night heron is perched in the gabion peninsula near the tide gates. Another flies out of the pine near the tide gates.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Allen's hummingbird and monarchs. The current wildlife in the Basin was also noted.

7:35 am. The great egret is on the gabion peninsula. A house finch calls from the top of the light post near the construction trailer. A snowy egret stands on the southern edge of the gabion peninsula. There are five double-crested cormorants drying themselves on the central mudflat. The Allen's hummingbird is in her nest. Two tree swallows fly over the Basin into the palm in the Fanta Sea parking lot.

7:50 am. A great blue heron and a mallard fish in the East Basin. One cormorant flies out of the Basin toward the marina. Workers plant along the southern slope of the southeast channel and install fence panels near the pump house.

8:05 am. A second mallard flies into the Basin. Two American wigeon fly out of the Basin due north. Three mourning doves are perched on the powerlines over the East Basin. One attempts to mate with another, but the female keeps flying away. The great blue heron catches a fish. Two barn swallows circle the Basin. A second great blue heron walks through the Central Basin.

8:21 am. Two house finches forage along the central scrub mix. A third great blue heron flies in. Several more house finches perch in the planted oaks. One killdeer is seen in the east mudflats.

8:35 am. An Anna's hummingbird is perched on the sign on the powerline post.

8:56 am. Four snowy egrets are in the West basin. The osprey flies in and perches on the pine closest to the tide gates. The Allen's hummingbird is in her nest.

9:10 am. The hummingbird leaves her nest. A great blue heron, great egret, two snowy egrets and a black-crowned night heron stand on the shallow waters south of the gabion peninsula. Five snowy egrets are in the Basin. A crow mobs the osprey as it flies over the Basin and again as it perches on the pine closest to the tide gates. A double-crested cormorant flies into the West Basin.

9:22 am. The Allen's hummingbird is seen feeding at least one of her nestlings.

9:45 am. An Anna's hummingbird calls from a pepper tree on the bike path. The mini excavator is being used to dig a trench for the electrical wires near the boat ramp.

10:02 am. Six double-crested cormorants stand on the bank of the Central Basin with two gadwall as eight wigeon wade in the water. The osprey returns and perches on the pine closest to the tide gates.

10:15 am. A rough-winged swallow flies over the East Basin. A mallard flies up to the end of the stormwater outfall.

10:58 am. A pair of mallards swim next to the tide gate. Seven double-crested cormorants stand on the bank of the Central Basin.

11:19 am. Two Allen's hummingbirds fly out of the trees on the bike path. Two Cassin's kingbirds perch on the powerlines by the East Basin.

11:48 am. Several house finches fly between the staged plants on the west end and the cottonwoods.

12:00 pm. Construction crews and the biological monitor take lunch.

12:55 pm. The biological monitor and crew members return from lunch. A great egret, eight American wigeon, a snowy egret, and two gadwall are in the West Basin. A black-crowned night heron is perched on the rails of the tide gate. One great blue heron stands in the water south of the gabion peninsula. The Allen's hummingbird is not in her nest. Seven double-crested cormorants stand on the bank of the central mudflat.

1:13 pm. Six American wigeon leave the Basin as water is let in from the marina. They appear to return, but possibly notice the turbulent water and continue flying.

1:20 pm. A killdeer runs across the central mudflat. Two barn swallows and a tree swallow fly across the Central Basin. A monarch butterfly flies over the central scrub mix and off site toward Washington. The killdeer moves to the West Basin as water levels rise. An Anna's hummingbird calls from the sign on the street lamp on Washington.

1:39 pm. Two snowy egrets walk in the waters of the central mudflat while two great blue herons fly about the Basin.

1:50 pm. Five barn swallows fly over the East Basin. An Allen's hummingbird is heard in the trees along the bike path. An Allen's hummingbird flies between branches in a eucalyptus by the boat ramp.

2:05 pm. Two great blue heron fly out of Basin due north. One returns and lands on the gabion peninsula. An Allen's hummingbird forages along the ground near the central pines.

2:25 pm. The Allen's hummingbird is not in her nest. An Allen's hummingbird calls aggressively

from the pine closest to the tide gates, it does not appear to be the nesting mother. A double-crested cormorant is perched on the pine closest to the tide gates.

2:39 pm. A third snowy egret joins the great egret on the gabion peninsula. The killdeer is in the West Basin. A pair of mallards are asleep on the gabion peninsula. Three barn swallows circle the West Basin. One forages in the mudflat before flying off.

3:07 pm. A Caspian tern flies over the Basin due west. A double-crested cormorant and snowy egret fly out of the basin due west.

3:30 pm. The biological monitor and all crew members leave the site for the day.

## **Additional Observations**

One osprey was observed perching in the West Basin. The osprey spent a total of about one hour on site.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

An Allen's hummingbird nest is located in the second pine from the tide gate. The female is occasionally observed on the nest and feeding at least one nesting. The female is very tolerant of nearby activity. Therefore, a nest buffer 25 feet in diameter was established. No worked occurred in the vicinity of the nest.

One monarch butterfly was observed today. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Construction crews planted the south bank near the southeast channel.

The crows' nests near the pump house were observed throughout the day, with at least one nest being active.

## **Conclusions**

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.

2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. An Allen's hummingbird nest is located in the second pine from the tide gate. The female is occasionally observed on the nest. The female is very tolerant of nearby activity. A nest buffer of 25 feet in diameter is in place.
4. No construction activities occurred in the water.
5. The number of fish surfacing and caught by cormorants and wading birds confirm that fish are entering the Basin through the tide gates.
6. Summer resident species including swallows are being observed more frequently and winter resident species such as the yellow-rumped warbler, ring-billed gulls, and lesser scaup are being observed less frequently.

**Table 1 provides a list of bird species observed during biological monitoring on April 11, 2016.**

<b>Table 1. Bird Species Observed during Biological Monitoring on April 11, 2016</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	1 individual observed on the mudflats.
Osprey	<i>Pandion haliaetus</i>	1 individual observed perching in the West Basin
Caspian Tern	<i>Hydroprogne caspia</i>	1 individual observed flying overhead
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
Great Egret	<i>Ardea alba</i>	1-2 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	5 individuals foraging throughout the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	2-3 individuals observed throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	3-4 individuals observed throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	6-8 individuals foraging throughout the Basin
Gadwall	<i>Anas strepera</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	7 individuals observed foraging in the Basin and flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	3 individuals observed flying overhead or perched on powerlines
Tree Swallow	<i>Tachycineta bicolor</i>	4-6 individuals observed above the West Basin
Barn Swallow	<i>Hirundo rustica</i>	5-6 individuals observed throughout the Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	2 individuals observed flying overhead in the southeast corner
Black Phoebe	<i>Sayornis nigricans</i>	1-2 individuals observed in the East and West

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		Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	Several individuals heard throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	4-6 individuals observed along the north and west banks
Anna's Hummingbird	<i>Calypte anna</i>	2-3 individuals observed hovering overhead or perching throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	3-4 individuals observed throughout the Basin; one active nest in a pine tree near the tide gates



## Memorandum

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Jennifer Jones, CDM Smith*  
*Christina M Gonzalez, CDM Smith*

*Date: April 12, 2016*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## Introduction

This memorandum summarizes the findings of biological monitoring on April 12, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:30 p.m. Weather conditions were mostly cloudy. Temperatures ranged from 54°F in the morning to 65°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with preparing soils and planting on the south bank, removing concrete by the tide gates, and installing fence panels around the pump house. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and only two crew members are on site.

6:25 am. The initial biological survey begins. One black-crowned night heron is perched on the railings near the tide gates. Two rock pigeons and two gulls fly overhead. Two double-crested cormorants are perched in the pine near the tide gates. The Allen's hummingbird is not in her nest, but one is heard in the pines nearby. A great blue heron walks on the gabion peninsula. Six American wigeon wade south of the berm. A great egret flies in from the southeast channel and perches on the railings near the tide gates next to the black-crowned night heron. Two mallards and two gadwall wade in the southeast channel and swim toward the greater Basin. An Anna's

hummingbird calls from the pepper tree near the pump house. Three American crows are in the eucalyptus by the pump house then quickly fly out. Two Cassin's kingbirds are in the palms along Washington. House finches can be heard singing in the trees nearby. A snowy egret is perched on the gabion peninsula near the tide gates.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Allen's hummingbird and her young, and monarchs. The current wildlife in the Basin was also pointed out.

7:10 am. Work begins. Workers continue on the same work as the day before which consists of planting on the southern slope, and installing fence panels near the pump house.

7:40 am. The black-crowned night heron stands on the gabion peninsula near the tide gates. An Anna's hummingbird calls from the sign on the light post on Washington. The great egret stands in the central mudflat. Two double-crested cormorants stand on the wall of the stormwater outfall to dry.

7:58 am. A third cormorant joins the other two on the stormwater outfall. A black-crowned night heron is on the stormwater outfall further away from the cormorants. A fourth cormorant joins the group. A mallard flies into the Basin from the north.

8:13 am. Two barn swallows forage in the West Basin. One killdeer is in the Central Basin. A black-crowned night heron is perched in the pine closest to the tide gates. A second black-crowned night heron is perched in the pine with the nest, but flies out as the biologist approaches. The female Allen's hummingbird is not in her nest, but one is heard chattering at a heron nearby.

8:36 am. An American crow forages on the south bank of the southeast channel. Two American crows are perched in the central pines. A second snowy egret walks along the southern bank near the tide gates.

9:21 am. A house finch calls from the light post next to the construction trailer. A rough-winged swallow flies across the Basin toward the parking lot. A tree swallow flies over the Basin. Crews remove the concrete siding near the tide gates.

9:38 am. A double-crested cormorant flies into the Basin south of the berm. A second Allen's hummingbird's nest is found (nest 2) in the pine closest to the tide gates. It can be seen when standing on the DG path in front of the third fence post facing the northwest peninsula. It is about 20 feet above the ground and behind and above a large cluster of pine cones. The female hummingbird is in her nest, leaves, then quickly returns after a few minutes.

10:03 am. The female Allen's hummingbird in the pine second from the tide gates (nest 1) is seen feeding her young. It appears there is only one nestling.

10:16 am. A great blue heron is perched on top of the pine closest to the tide gates. A European starling perches on the light post closest to the trailer. Two house finches are perched on the



privacy fence in the northwest corner. Three American crows forage in the construction parking lot.

10:24 am. A mourning dove perches on the west fence, a double-crested cormorant flies into the West Basin, and a rock pigeon flies overhead toward Washington. An Anna's hummingbird is perched on an oak next to the northwest peninsula; a second one is perched on the sign on the light post on Washington.

10:40 am. Two rough-winged swallows fly over the west scrub mix.

10:50 am. Three house finches perch on the powerlines in front of the construction trailer. Four American wigeon wade in the Central Basin. Two great blue heron fly north out of the Basin. One returns to the East Basin. A black-crowned night heron flies into the berm near the workers removing concrete. A cloudless Sulphur butterfly flies across the staged plants on the west end.

11:08 am. Four American wigeon leave the Basin due west. A stingray is seen in the West Basin south of the berm. Neither hummingbirds are in their nests. Two mourning doves are foraging in the staged plants on the west end.

11:31 am. A house sparrow forages throughout the staged plants on the west end.

11:41 am. Three Cassin's kingbirds fly between palms on Washington. Three double-crested cormorants stand on the stormwater outfall, another swims in the Basin. A dark-eyed junco is perched in the eucalyptus behind the east pine. A mallard swims alone in the East Basin.

11:53 am. An Anna's hummingbird is perched in the pepper tree by the pump house. A crow is in the active nest along the bike path.

12:00 pm. Construction crews and the biological monitor take lunch.

1:08 pm. The biological monitor and crew members return from lunch. Three snowy egrets and one great egret are standing on the gabion peninsula. A female hummingbird sits on nest 2; no adult bird is seen on nest 1. There is a black-crowned night heron perched nearby with an Allen's hummingbird chattering. It is possible she is attempting to defend her nest from the heron. Five American wigeon wade south of the berm.

1:19 pm. Two double-crested cormorants stand on either side of the stormwater outfall. A snowy egret walks the banks nearby. Two more double-crested cormorants fish in the Basin, one flies east. Two tree swallows fly over the boat ramp. The crow is in its nest in a tree across the bike path. A Cassin's kingbird is perched at the very top of the eucalyptus tree behind the east pine. A great blue heron flies in from the north and lands on the gabion peninsula.

1:49 pm. A European starling is in a palm along Washington. An American crow forages through the central scrub mix. A double-crested cormorant flies north out of the Basin. An Anna's hummingbird calls from the sign on the light post on Washington.

2:04 pm. A killdeer is in the central mudflat and begins to call when it sees a crow on the northwest peninsula. The crow flies to the west mudflat and the killdeer follows but keeps its distance. The crow flies offsite.

2:22 pm. A house sparrow is perched in the utility pole on the northwest peninsula. A monarch butterfly flies over the peninsula toward the parking lot. A ring-billed gull circles the Basin. A snowy egret flies west out of the Basin. An Anna's hummingbird calls while flying around an oak tree then lands on the nearby sign. Two mourning doves fly onto the west staging area.

2:45 pm. Two house finches are perched on the silt fence of the West Basin. Neither female hummingbirds are at their nests. The young hummingbird's beak is seen poking out of nest 1. The female returns and two nestlings are confirmed. The mother of nest 2 is back in her nest. Two snowy egrets and the great blue heron are on the gabion peninsula.

3:10 pm. A red admiral butterfly is seen near the boat ramp on a rock. A grey hairstreak butterfly is seen on one of the newly planted plants near the pump house. Two Eurasian collard doves perch on the powerlines above the West Basin then down to forage in the scrub mix. A ring-billed gull flies over the Basin heading west.

3:30 pm. The biological monitor and all crew members leave the site for the day.

## **Additional Observations**

No Osprey, Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

An Allen's hummingbird nest is located in the second pine from the tide gate (nest 1). The female is occasionally observed on the nest. The female is very tolerant of nearby activity. There are two confirmed nestlings in this nest. A second Allen's hummingbird nest was found in the pine closest to the tide gates (nest 2). It is higher than the first nest, and the hummingbird is also tolerant of nearby activity. Therefore, a nest buffer 25 feet in diameter was established. No worked occurred in the vicinity of the nests.

One monarch butterfly was observed today along with a cloudless Sulphur, red admiral and a grey hairstreak butterfly. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Construction crews planted the south bank near the southeast channel.

The crows' nests across the bike path from the pump house were observed throughout the day, with at least one nest being active.

## Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. Two Allen's hummingbird nests are located in the two pines by the tide gate. Both females are occasionally observed on the nest. Both of the females are very tolerant of nearby activity. A nest buffer 25 feet in diameter was established.
4. No construction activities occurred in the water.
5. One monarch, one cloudless Sulphur, one red admiral, and one grey streak were observed today.
6. The number of fish surfacing and caught by cormorants and wading birds confirm that fish are entering the Basin through the tide gates. A stingray was also seen near the tide gates along the gabion peninsula wall.
7. Summer resident species including swallows are being observed more frequently and winter resident species such as the yellow-rumped warbler, ring-billed gulls, and lesser scaup are being observed less frequently.

**Table 1 provides a list of bird species observed during biological monitoring on April 12, 2016.**

Table 1. Bird Species Observed during Biological Monitoring on April 12, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	1 individual observed on the mudflats.
Great Egret	<i>Ardea alba</i>	1-2 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	4-5 individuals foraging throughout the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	2-3 individuals observed throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	2-3 individuals observed throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	4-5 individuals foraging throughout the Basin
Gadwall	<i>Anas strepera</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	5 individuals observed foraging in the Basin and flying overhead

Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	4-6 individuals observed flying overhead or perched on powerlines
Tree Swallow	<i>Tachycineta bicolor</i>	4-6 individuals observed above the West Basin
Barn Swallow	<i>Hirundo rustica</i>	5-6 individuals observed throughout the Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	4-5 individuals observed flying overhead in the southeast corner
Dark-eyed Junco	<i>Junco hyemalis</i>	Several individuals heard throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	4-6 individuals observed along the north and west banks
Anna's Hummingbird	<i>Calypte anna</i>	2-3 individuals observed hovering overhead or perching throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	3-4 individuals observed throughout the Basin; two active nests in pine trees near the tide gates
Eurasian-collared Dove	<i>Streptopelia decaocto</i>	2 individuals observed perched on a power line
European Starling	<i>Sturnus vulgaris</i>	1 individual observed along Washington Boulevard
Ring-billed Gull	<i>Larus delawarensis</i>	3 individuals observed flying overhead

The following photographs show the second Allen's hummingbird nest and the buffer place.



Figure 1 – Close up of the Allen's hummingbird nest (nest2) in the pine closest to the tide gates



Figure 2 – Full view of pine with nest facing north





Figure 3 – Nest buffer facing west



Figure 4 – Nest buffer facing east





## Memorandum

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Jennifer Jones, CDM Smith*  
*Christina M Gonzalez, CDM Smith*

*Date: April 13, 2016*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## Introduction

This memorandum summarizes the findings of biological monitoring on April 13, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:30 p.m. Weather conditions were mostly cloudy. Temperatures ranged from 59°F in the morning to 64°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with preparing soils and planting on the south bank, electrical work in at the tide gate and pump house, and installing fence posts along Admiralty Way. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and a few crew members are on site.

6:30 am. The initial biological survey begins. Two house sparrows are perched on the powerlines by the construction trailer. A double-crested cormorant is perched in the pine next to the tide gate; an Allen's hummingbird chatters and dives toward it. A black-crowned night heron is perched on the railing of the tide gates. Both Allen's hummingbird nests are currently vacant. Six American wigeon swim south of the berm. An Anna's hummingbird calls from the pepper tree by the pump house. Two mallards are at the bottom of the boat ramp grooming themselves. The crow is in the nest over the green house across the bike path. A double-crested cormorant flies into the East

Basin. Another stands on the walls of the stormwater outfall with a black-crowned night heron. A great blue heron and a black-crowned night heron stand near the trash screen. Two black-crowned night herons and a great blue heron stand on the gabion peninsula. A killdeer calls from the west mudflat.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Allen's hummingbirds and monarchs. The current wildlife in the Basin was also pointed out.

7:10 am. Work begins. Workers continue on the same work as the day before which consists of planting on the southern slope, and installing fence posts along Admiralty Way and electrical work by the pump house. A great egret lands on the gabion peninsula. Two mallards are in the stormwater outfall.

7:50 am. Two mallards fly out of the Basin, but the male returns after a couple of circles over the Basin. A snow egret lands on the gabion peninsula.

8:10 am. Both nests remain vacant, but an Allen's hummingbird can be heard in the pine closest to the tide gates. An American crow is perched in the central pines. Three double-crested cormorants and a snowy egret are perched on the stormwater outfall. A black phoebe is perched on a wooden stake near the East basin. Workers continue landscape work and begin scaffolding at the trench near the boat ramp.

8:34 am. An Anna's hummingbird perches on an oak tree in the central scrub mix.

8:50 am. Two crows perch on the powerlines by the construction trailer. Electricians work on the pump house and tide gate panels.

9:08 am. The killdeer grooms itself in the central mudflat. Five double-crested cormorants and one snowy egret stand on the wall of the stormwater outfall. House finches can be heard in the palms along Washington. The male mallard leaves the East Basin due west. Two more mallards leave the Basin due north.

9:21 am. Another male mallard flies into the East Basin. The snowy egret moves to the gabion peninsula. A black phoebe is perched on the silt fence near the stormwater outfall.

9:36 am. Workers begin to lay the stabilizing netting along the southern slope of the southeast channel. A rough-winged swallow flies over the Basin. A Cassin's kingbird is perched at the very top of the eucalyptus tree behind the east pine. A house sparrow flies onto the bank of the southeast channel but quickly flies north. An American crow forages on the south slope of the East Basin.

9:53 am. An Anna's hummingbird is perched on the pepper tree by the pump house. A dark-eyed junco is calling from the eucalyptus by the pump house.

10:15 am. A barn swallow flies over the southeast channel. A yellow-rumped warbler is in the

eucalyptus tree behind the pump house. A tree swallow flies over the southeast channel. An American crow perches on a post near the pump house. A double-crested cormorant flies into the southeast channel.

10:29 am. A snowy egret flies into the Basin from the marina.

10:42 am. The Basin is very quiet, with only a few species present. The nest in the pine second from the tide gates (nest 1) is currently vacant; the nest in the pine closets to the tide gates (nest 2) is occupied by a female Allen's hummingbird.

10:51 am. The female Allen's hummingbird returns to nest 1 and feeds her young. She then flies off toward the marina.

11:09 am. A mallard flies out of the Basin.

11:24 am. Two crows eat a fish in the west mudflat. The killdeer calls out and both crows chase it into the Central Basin then fly west. A ring-billed gull flies overhead. A cloudless Sulphur butterfly flies through the west scrub mix.

11:38 am. Two rough-winged swallows fly over the West Basin toward the Killer Café. The great blue heron flies from the gabion peninsula to the stormwater outfall. A black phoebe flies west across the Basin.

11:45 am. A mourning dove forages in the central mudflat. A cormorant from the stormwater outfall flies into the east basin. Another cloudless Sulphur flies from the gabion peninsula and begins foraging in the central scrub mix. An Anna's hummingbird calls from the sign on the light post. A Caspian tern stands in the central mudflat.

12:00 pm. Construction crews and the biological monitor take lunch.

12:45 pm. The biological monitor and crew members return from lunch. Several house finches fly between bushes and the powerlines near the construction trailer. The Allen's hummingbird is in nest 2, the mother of nest 1 is not at her nest, but the two nestlings can be seen poking out. The killdeer is in the central mudflat, as is the Caspian tern. Two American crows forage on the southern slope near the central pines. Two double-crested cormorants stand on either wall of the stormwater outfall. A snowy egret sleeps on the gabion peninsula. One gadwall swims in the East Basin, a mallard is asleep next to the cormorants.

1:14 pm. A double-crested cormorant gets out of the water and joins the other two on the stormwater outfall along with the great blue heron that flew in from the east. An Allen's hummingbird forages near the central pines.

1:45 pm. Two mallards fly out of the southeast channel. A cloudless Sulphur butterfly is seen near the boat ramp. Crews dig small holes along the walking path and dig a trench nearby.

2:15 pm. After circling the Basin for a few minutes the Caspian tern catches a fish. A ring-billed gull flies in and tries to snatch it out of its mouth. A crow comes and tries to get scraps. The great blue heron scares the birds and the fish gets dropped back into the water where the heron collects it. A double-crested cormorant tries to take it from the heron but is unsuccessful.

2:30 pm. A house sparrow is seen foraging in the central scrub vegetation. An Anna's hummingbird calls from an oak nearby.

3:05 pm. A rock pigeon flies over the Basin toward the Killer Café. Two great blue heron are on the gabion peninsula.

3:18 pm. A mourning dove is perched on the wires by the construction trailer.

3:30 pm. The biological monitor and all crew members leave the site for the day.

## **Additional Observations**

No Osprey, Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

An Allen's hummingbird nest is located in the second pine from the tide gate (nest 1). The female is occasionally observed on the nest. There are two confirmed nestlings in this nest. A second Allen's hummingbird nest was found in the pine closest to the tide gates (nest 2). It is higher than the first nest, and the hummingbird is tolerant of nearby activity. A nest buffer 25 feet in diameter was established. No work occurred in the vicinity of the nests.

No monarch butterflies were observed; however, two cloudless Sulphur butterflies were observed. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

The crows' nests across the bike path from the pump house were observed throughout the day, with at least one nest being active.

## **Conclusions**

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often

increases slightly in the late afternoon.

3. Two Allen's hummingbird nests are located in the two pines from the tide gate. Both females are occasionally observed on the nest. The females are very tolerant of nearby activity. A nest buffer 25 feet in diameter was established.
4. No construction activities occurred in the water.
5. The number of fish surfacing and caught by cormorants and wading birds confirm that fish are entering the Basin through the tide gates. A stingray was also seen near the tide gates along the gabion peninsula wall.
6. Summer resident species including swallows are being observed more frequently and winter resident species such as the yellow-rumped warbler, ring-billed gulls, and lesser scaup are being observed less frequently.

**Table 1 provides a list of bird species observed during biological monitoring on April 13, 2016.**

<b>Table 1. Bird Species Observed during Biological Monitoring on April 13, 2016</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	1 individual observed on the mudflats.
Great Egret	<i>Ardea alba</i>	1-2 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	4-5 individuals foraging throughout the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	2-3 individuals observed throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	2-3 individuals observed throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	4-5 individuals foraging throughout the Basin
Gadwall	<i>Anas strepera</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	5 individuals observed foraging in the Basin and flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	4-6 individuals observed flying overhead or perched on powerlines
Tree Swallow	<i>Tachycineta bicolor</i>	4-6 individuals observed above the West Basin
Barn Swallow	<i>Hirundo rustica</i>	5-6 individuals observed throughout the Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	4-5 individuals observed flying overhead in the southeast corner
Dark-eyed Junco	<i>Junco hyemalis</i>	Several individuals heard throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	4-6 individuals observed along the north and west banks
Anna's Hummingbird	<i>Calypte anna</i>	2-3 individuals observed hovering overhead or

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		perching throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	3-4 individuals observed throughout the Basin; two active nests in pine trees near the tide gates
Ring-billed Gull	<i>Larus delawarensis</i>	3 individuals observed flying overhead
Caspian Tern	<i>Hydroprogne caspia</i>	1 individual flying over the Basin



## Memorandum

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Jennifer Jones, CDM Smith*  
*Christina M Gonzalez, CDM Smith*

*Date: April 14, 2016*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## Introduction

This memorandum summarizes the findings of biological monitoring on April 14, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:30 p.m. Weather conditions were mostly cloudy. Temperatures ranged from 57°F in the morning to 65°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with preparing soils on the south bank, electrical work in at the tide gate and pump house for the lighted bollards, and installing fence panels along Admiralty Way. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and a few crew members are on site.

6:30 am. The initial biological survey begins. A Caspian tern eats a fish in the west mudflat. Two black-crowned night heron are perched near the tide gates. A double-crested cormorant is fishing nearby. An Allen's hummingbird flies around the pine closest to the tide gates. Both Allen's hummingbird nests are currently unoccupied. A third black-crowned night heron stands on the bank of the southern slope near the west pines. A snowy egret flies west across the basin and lands near the tide gates. Two double-crested cormorants stand on the walls of the stormwater outfall. Two mallards and two gadwall swim in the East Basin. The crow is in the nest across the bike path

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above the green house. An Anna's hummingbird calls from the pepper tree by the pump house. European starlings and house finches are heard along Washington. Two house finches forage in the central scrub mix. A house sparrow forages in the debris in the west corner of the site.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Allen's hummingbird nests and monarchs. The current wildlife in the Basin was also pointed out.

7:42 am. A great egret is perched on the railing of the tide gate.

7:59 am. The Caspian tern begins to fly overhead in search of fish.

8:08 am. The killdeer flies out from the central mudflat toward the marina. Three male mallards swim together in the West Basin.

8:57 am. A ring-billed gull flies west overhead. A great blue heron stands on the gabion peninsula. A European starling perches on the silt fence of the central mudflat before flying west. The Caspian tern returns and circles the Basin. It has what appears to be fishing line stuck to its bill. It does not seem to be affecting its flight or behavior. Animal rescue was called and someone may attempt to capture the tern this afternoon. An Anna's hummingbird calls from the sign on the light post on Washington. The tern lands in the central mudflat.

9:00 am. Upon closer inspection, the tern appears to have a fishing hook caught in its bill with about two feet of fishing line. A barn swallow flies over the East and Central Basins. The killdeer is grooming itself in the central mudflat. Four house finches forage in the mix of the northeast peninsula.

9:16 am. The great egret and great blue heron walk toward the central mudflat.

9:41 am. An Anna's hummingbird calls from the pepper tree near the pump house. Two barn swallows fly between the southeast channel and trees behind the bike path. An Allen's hummingbird hovers over the southeast channel.

9:56 am. Allen's hummingbird nest 1 is observed with the nestlings in it, but the female is not present. The female is present in nest 2. She appears to be incubating eggs.

10:32 am. A rough-winged swallow flies over the West Basin.

11:48 am. Two snowy egrets forage along the southern bank.

12:00 pm. Construction crews and the biological monitor take lunch.

12:57 pm. The biological monitor and crew members return from lunch. A ring-billed gull flies over the Basin. An American crow lands in the central mudflat and startles the killdeer. A monarch butterfly flies between plants on the northwest peninsula. An Anna's hummingbird calls from the



sign on the light post on Washington.

1:22 pm. Two mallards leave the Basin due west. A snowy egret hunts for food in the East Basin. A gadwall wades nearby. Two mallards come in from the east and land in the West Basin.

1:30 pm. Three mallards leave the Basin over the southeast channel. A pair flies in next to the boat ramp, then flies up to rest on the concrete wall.

1:48 pm. Two tree swallows fly over the southeast channel.

2:00 pm. A double-crested cormorant flies into the Basin south of the berm.

2:11 pm. Four snowy egrets line the bank of the southern slope.

2:57 pm. A double-crested cormorant, a great blue heron, and a snowy egret are standing on the bank of the central mudflat. A rock pigeon flies overhead. Several house finches forage in the staged plants on the west end.

3:07 pm. The killdeer flies into the west mudflat.

3:30 pm. A Cassin's kingbird can be heard calling from the palms along Washington.

3:45 pm. The biological monitor and all crew members leave the site for the day.

## **Additional Observations**

No Osprey, Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

An Allen's hummingbird nest is located in the second pine from the tide gate (nest 1). The female is occasionally observed on the nest. There are two confirmed nestlings in this nest. A second Allen's hummingbird nest was found in the pine closest to the tide gates (nest 2). It is higher than the first nest, and the hummingbird is tolerant of nearby activity. A nest buffer 25 feet in diameter was established. No work occurred in the vicinity of the nest.

One monarch butterfly was observed today. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

The crows' nests across the bike path from the pump house were observed throughout the day, with at least one nest being active.

A Caspian tern was observed today with a fishing hook in its bill with about 2 feet of fishing line attached. Local wildlife agencies were contacted, but by the time they had arrived, the tern had left. The warden of California Department of Fish and Wildlife was notified of the incident.

## Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. Two Allen's hummingbird nests are located in the two pines from the tide gate. Both females are occasionally observed on the nest. The females are very tolerant of nearby activity. A nest buffer 25 feet in diameter was established.
4. No construction activities occurred in the water.
5. The number of fish surfacing and caught by cormorants and wading birds confirm that fish are entering the Basin through the tide gates. A stingray was also seen earlier this week near the tide gates along the gabion peninsula wall.

**Table 1 provides a list of bird species observed during biological monitoring on April 14, 2016.**

<b>Table 1. Bird Species Observed during Biological Monitoring on April 14, 2016</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	1 individual observed on the mudflats.
Great Egret	<i>Ardea alba</i>	1-2 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	4-5 individuals foraging throughout the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	2-3 individuals observed throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	2-3 individuals observed throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	4-5 individuals foraging throughout the Basin
Gadwall	<i>Anas strepera</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	3-4 individuals observed foraging in the Basin and flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin

Tree Swallow	<i>Tachycineta bicolor</i>	2-3 individuals observed above the West Basin
Barn Swallow	<i>Hirundo rustica</i>	2-3 individuals observed throughout the Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	1 individual observed flying overhead in the southeast corner
Dark-eyed Junco	<i>Junco hyemalis</i>	Several individuals heard throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	4-6 individuals observed along the north and west banks
Anna's Hummingbird	<i>Calypte anna</i>	2-3 individuals observed hovering overhead or perching throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	3-4 individuals observed throughout the Basin; two active nests in pine trees near the tide gates
Ring-billed Gull	<i>Larus delawarensis</i>	1-2 individuals observed flying overhead
Caspian Tern	<i>Hydroprogne caspia</i>	1 individual flying over the Basin and in the mudflats.



Figure 1 – The Caspian tern with the fish hook and line in its bill.



## **Memorandum**

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Jennifer Jones, CDM Smith*  
*Christina M Gonzalez, CDM Smith*

*Date: April 15, 2016*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## **Introduction**

This memorandum summarizes the findings of biological monitoring on April 15, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:30 p.m. Weather conditions were clear with winds reaching up to 18 mph. Temperatures ranged from 59°F in the morning to 78°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with installation of scaffolding and concrete pouring for the sidewalk ramps near the boat ramp, installation of irrigation lines on the opposite side of the boat ramp, the setting of rebar reinforcement for the concrete pad at the bike plaza, and installing fence panels along Admiralty Way. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## **Biologist's Field Log**

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is locked and a few crew members are waiting in the parking lot.

6:30 am. The initial biological survey begins. There are high winds in the area. A double-crested cormorant is swimming in the west Basin. A snowy egret is tucked in a corner next to the tide gates. A black-crowned night heron is perched on the railing above. A snowy egret stands on the north bank of the southeast channel while a double-crested cormorant swims past toward the greater Basin. A crow is in the nest across the bike path above the green house. An Allen's hummingbird can

be heard nearby. Two mallards sleep on the ground under the east pine. Four black-crowned night heron, one black phoebe, and 5 double-crested cormorants are perched on the walls of the stormwater outfall. An Anna's hummingbird is perched on an oak near the northwest peninsula.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Allen's hummingbirds, informing them of her young and to be aware of the presence of monarchs. The current wildlife in the Basin was also pointed out.

7:35 am. A pair of mallards and a pair of gadwall are grooming themselves in the west mudflat. Crews install fence panels along Admiralty Way. Scaffolding goes in near the boat ramp for concrete curbing. Irrigation lines are being installed on the opposite end.

8:15 am. An American crow forages on the southern slope of the Basin. Two workers build rebar reinforcement at the bike plaza.

9:04 am. Two mallards circle the Basin.

9:31 am. A great blue heron is perched on the gabion peninsula. Two house finches fly onto the berm, but quickly fly off toward the northwest peninsula. Two snowy egrets and a great egret stand on the lower portion of the berm. A killdeer flies into the west mudflat.

9:50 am. A pair of mallards sleep on the gabion peninsula.

10:09 am. A mourning dove forages in the central scrub mix. Another mourning dove and a house finch forage in the west scrub mix.

10:24 am. Two hooded mergansers and a double-crested cormorant wade in the southern portion of the Basin. Three snowy egrets, a great egret, and a great blue heron are on the gabion peninsula.

11:20 am. The crow is in its nest above the green house across the bike path despite the high winds. Three northern rough-winged swallows fly near the pump house.

11:37 am. The killdeer sits in the west mudflat. A mourning dove forages in the west scrub mix.

12:00 pm. Construction crews and the biological monitor take lunch.

12:53 pm. The biological monitor and crew members return from lunch. Two mallards swim in the west Basin. Several house finches fly over the west scrub mix into the parking lot. A snowy egret flies in and lands next to the two others foraging along the east bank. The Allen's hummingbird nest 2 is seen with the mother in it for the first time today. Nest 1 remains unoccupied. A black-crowned night heron is perched in the 3<sup>rd</sup> pine from the tide gate.

1:04 pm. A double-crested cormorant flies out of the Basin and heads toward the marina. Two snowy egrets fly out and head in the same direction.

1:25 pm. A double-crested cormorant flies into the Central Basin. A dark-eyed junco is heard singing in the trees across Admiralty Way.

1:41 pm. A ring-billed gull flies overhead due north. The three double-crested cormorants are perched on the walls of the stormwater outfall.

1:54 pm. A western gull flies overhead due north. Crews begin to stabilize the blown over privacy fence along Washington. A monarch butterfly flies under the pines by the tide gate. Concrete is being placed near the boat ramp.

2:32 pm. Five house finches are perched on the powerlines by the construction trailer. A double-crested cormorant flies out of the Basin toward the marina.

3:14 pm. An Anna's hummingbird calls from an oak tree near the northwest peninsula. Four double-crested cormorants are perched on the walls for the stormwater outfall.

3:42 pm. An Allen's hummingbird chatters in the pines with nest 1. The black-crowned night heron is still in the far pine. The hummingbird in nest 1 has not been observed in the nest all day. The hummingbird in nest 2 is sitting in her nest. An American crow flies into the pine closest to the tide gate. Several house finches and house sparrows are heard along the staging area on the west end. Crews finish up the finishing on the concrete near the boat ramp and by the tide gates.

4:30 pm. The cement truck cleans up and heads out. The biological monitor and all crew members leave the site for the day.

## **Additional Observations**

No Osprey, Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

An Allen's hummingbird nest is located in the second pine from the tide gate (nest 1). The female was not seen in her nest, and due to the high winds, it was not clear if the nestlings were still in the nest either. A second Allen's hummingbird nest located in the pine closest to the tide gates (nest 2) was observed with the female hummingbird in it. No worked occurred in the vicinity of the nests.

One monarch butterfly was observed today. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

The crows' nests across the bike path near the pump house were observed throughout the day, with at least one nest being active.

High winds were experienced throughout the entire work day. It is possible that this kept the wildlife activity fairly low within the Basin.

No planting occurred today.

## Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. Two Allen's hummingbird nests are located in the two pines from the tide gate. Both females are occasionally observed on the nests. The females are very tolerant of nearby activity. A nest buffer 25 feet in diameter was established. No work occurred with the buffer today.
4. No construction activities occurred in the water.
5. The number of fish surfacing and caught by cormorants and wading birds confirm that fish are entering the Basin through the tide gates.

**Table 1 provides a list of bird species observed during biological monitoring on April 15, 2016.**

<b>Table 1. Bird Species Observed during Biological Monitoring on April 15, 2016</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	1 individual observed on the mudflats.
Great Egret	<i>Ardea alba</i>	1 individual foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	4-5 individuals foraging throughout the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	4-5 individuals observed throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	1-2 individuals observed throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	4-5 individuals foraging throughout the Basin
Gadwall	<i>Anas strepera</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	5-6 individuals observed foraging in the Basin and flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on



		structures to the south and west of the Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	3 individuals observed flying overhead in the southeast corner
Dark-eyed Junco	<i>Junco hyemalis</i>	1-2 individuals heard in the trees surrounding the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	4-6 individuals observed along the north and west banks
Anna's Hummingbird	<i>Calypte anna</i>	2-3 individuals observed hovering overhead or perching throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	3-4 individuals observed throughout the Basin; two active nests in pine trees near the tide gates
Ring-billed Gull	<i>Larus delawarensis</i>	1-2 individuals observed flying overhead
Western Gull	<i>Larus occidentalis</i>	1 individual observed flying overhead
Hooded Merganser	<i>Lophodytes cucullatus</i>	2 individuals wading throughout the Basin



## Memorandum

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Jennifer Jones, CDM Smith*  
*Christina M Gonzalez, CDM Smith*

*Date: April 16, 2016*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## Introduction

This memorandum summarizes the findings of biological monitoring on April 16, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:30 p.m. Weather conditions were clear. Temperatures ranged from 61°F in the morning to 78°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with digging holes for irrigation along the southern slope of the southeast channel, backfilling trenches and installing irrigation on the northern and southern slopes of the southeast channel, general cleaning in the construction parking lot, and masonry work behind the tide gate house. All crews were overseen by the Contractor Superintendent.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and a few crew members are waiting in the parking lot.

6:30 am. The initial biological survey begins. A black-crowned night heron is perched on the railing of the tide gate. House finches call from the bushes on the west end. The female Allen's hummingbird is sitting on nest 2 as another Allen's hummingbird calls between the two trees. No adult is in nest 1, and the nestlings cannot be seen. A great egret flies into the Basin into the gabion peninsula. Two house finches forage in the plants on the southern slope. A black-crowned night heron is perched on the bottom step on the gabion peninsula. A great blue heron flies in and scares

the great egret; both stand on the gabion peninsula. Two gadwall swim in the southern portion of the basin. Two mallards fly into the east Basin from the west. A black phoebe is perched on a wooden stake in the southeast channel. A black-crowned night heron is standing on the bank by the pump house. The crow's nest across the bike path above the green house appears to be empty. An American crow is perched in a eucalyptus tree behind the pump house. A western gull flies overhead. An Anna's hummingbird calls from the pepper tree behind the pump house. Two double-crested cormorants dry their wings on the stormwater outfall. A black-crowned night heron stands on the wall near the trash screen. Two house finches perched on a nearby pilaster. A killdeer is in the Central Basin.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Allen's hummingbirds, informing them of young, and to be on the watch for monarchs. The current wildlife in the Basin was also pointed out.

7:39 am. A mallard walks on the west mudflat. Two tree swallows fly over the Basin. A snowy egret flies in and lands on the lower portion of the gabion peninsula.

8:30 am. A dark-eyed junco is heard singing in the trees across Admiralty Way. A mallard sleeps in the east Basin. Workers continue to dig along the northern slope of the southeast channel for landscaping; irrigation lines continue to be installed on the northern slope of the southeast channel. A snowy egret walks along the bank of the southeast channel near the boat ramp.

9:01 am. A cloudless sulphur butterfly flies between plants on the northern slope. A ring-billed gull flies over the Basin. A double-crested cormorant flies out of the Basin toward the marina. Four gulls fly overhead. Two Cassin's kingbirds are perched on palms along Washington. A European starling is seen flying between palms along Washington. A grey hairstreak butterfly is perched on the ground near the bike plaza.

9:14 am. Four house finches are perched on the utility pole on the northeast peninsula.

9:36 am. Two northern rough-ringed swallows fly over the west Basin.

9:56 am. A tree swallow forages in the central mudflat. A cloudless sulphur flies over the plants of the northeast peninsula.

10:11 am. A monarch butterfly flies over the northeast peninsula. A worker uses the roller to compact the decomposed granite (DG) path on Admiralty Way.

10:36 am. A Caspian tern flies over the Basin and begins to fish. It does not have a fishing hook caught in its beak (as was observed earlier in the week). A cloudless sulphur flies into the plants on the west end. An Anna's hummingbird calls from the sign on the light post on Washington.

10:46 am. A monarch flies over the northwest peninsula. Two barn swallows circle the West Basin.

11:00 am. Two mourning doves perch on the black fence near the central Basin. The female Allen's

hummingbird in nest 2 flies into her nest and nest 1 remains unoccupied.

11:14 am. An American crow calls from one of the central pines.

11:45 am. Three killdeer are in the west mudflat. Two appear to be aggressive toward one by chasing and calling after it.

11:57 am. A snowy egret flies into the southern portion of the Basin.

12:00 pm. Construction crews and the biological monitor take lunch.

12:45 pm. The biological monitor and crew members return from lunch. Crew members continue working on the masonry work by the tide gates and along the southeast channel.

1:04 pm. A European starling perches on the powerlines near the construction trailer.

1:32 pm. Two cloudless sulphur butterflies fly among the staged plants on the west end. A snowy egret stands on the wall near the tide gates. The great blue heron stands on the gabion peninsula. A double-crested cormorant flies into the west Basin. Allen's hummingbird nest 2 is occupied, nest 1 is not. The Caspian tern returns and begins driving in the Basin. A double-crested cormorant and a mallard stand on the wall of the stormwater outfall. Another double-crested cormorant swims near the great egret in the east Basin.

1:52 pm. A ring-billed gull flies overhead from the east. A great hairstreak butterfly is observed in the plants near the pump house.

2:25 pm. A great blue heron leaves the Basin over the southeast channel and heads north. Three house sparrows forage in the plants near the pump house. A house finch flies in and perches on the eucalyptus by east of the pump house. A house sparrow flies off with a ladybug in its mouth.

2:35 pm. An Allen's hummingbird perches on the eucalyptus by the pump house before flying offsite toward Admiralty Way. A mallard leaves the Basin over the southeast channel.

2:52 pm. A pacific orange tip butterfly flies among the plants on the north edge of the southeast channel.

3:03 pm. A double-crested cormorant swims into the southeast channel and catches a fish. Two great blue herons fly into the southeast channel. One flies back toward the greater Basin, the other remains walking along the bank.

3:10 pm. Three mallards swim together in the East Basin. At least four pacific orange tip butterflies are feeding on the plants near the pump house. A monarch butterfly flies over the southeast channel near the pump house. A mallard flies into the southeast channel. A ring-billed gull flies overhead due east.

3:30 pm. A western gull flies overhead due east.

3:45 pm. The biological monitor and all crew members leave the site for the day.

## **Additional Observations**

No Osprey, Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

Of the two Allen's hummingbird's nests, only nest 2 was observed with a female hummingbird in it. Nestlings in nest 1 could not be seen. No work occurred in the vicinity of the nests.

Three monarch butterflies were observed today as well as several cloudless sulphurs, a grey hairstreak, and at least five pacific orange tip butterflies. It is possible that the higher temperatures can account for the increased number of butterflies. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

The crows' nests across the bike path from the pump house were observed throughout the day, with at least one nest being active.

A Caspian tern returned to the Basin today. It did not have a hook in its beak as was observed earlier in the week. It is unclear whether it is a different tern or if the hook has fallen off.

No planting occurred today.

## **Conclusions**

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and finches. Wildlife activity often increases slightly in the late afternoon.
3. Two Allen's hummingbird nests are located in the two pines adjacent to the tide gate. The female in Nest 2 has been observed throughout the day, while the female and nestlings in nest 1 have not been seen in two days. The females are very tolerant of nearby activity. A nest buffer 25 feet in diameter was established. No work occurred within the buffer today.

4. No construction activities occurred in the water.
5. The number of fish surfacing and caught by cormorants and wading birds confirm that fish are entering the Basin through the tide gates.

**Table 1 provides a list of bird species observed during biological monitoring on April 16, 2016.**

<b>Table 1. Bird Species Observed during Biological Monitoring on April 16, 2016</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	3 individuals observed on the mudflats.
Great Egret	<i>Ardea alba</i>	1 individual foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	4-5 individuals foraging throughout the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	4-5 individuals observed throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	2 individuals observed throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	4-5 individuals foraging throughout the Basin
Gadwall	<i>Anas strepera</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	4-5 individuals observed foraging in the Basin and flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	3 individuals observed flying overhead in the southeast corner
Dark-eyed Junco	<i>Junco hyemalis</i>	1-2 individuals heard in the trees surrounding the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	4-6 individuals observed along the north and west banks
Anna's Hummingbird	<i>Calypte anna</i>	2-3 individuals observed hovering overhead or perching throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	3-4 individuals observed throughout the Basin; two active nests in pine trees near the tide gates
Ring-billed Gull	<i>Larus delawarensis</i>	2-3 individuals observed flying overhead
Western Gull	<i>Larus occidentalis</i>	1 individual observed flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	1 individual perched in a stake in the southeast channel
Caspian Tern	<i>Hydroprogne caspia</i>	1 individual flying over the Basin and in the mudflats.